

REMARKS/ARGUMENTS

Claims 1-8 remain in this application. Claims 1, 5 and 7 have been amended to place the claims in a more readable format, without changing the scope of the claims.

Applicants respectfully traverse the rejection of claims 1-8 under 35 U.S.C. §102(b) as being anticipated by Best U.S. patent 2,870,698. The essence of the claimed invention is to achieve temperature control by controlling the amount of pressurized air which is delivered to an ejector device, not by controlling the amount of the pressurized air flowing through a heat exchanger. The temperature control is achieved by varying the coolant air flow which is induced through the heat exchanger by virtue of the ejector device.

The claims require control of the supply of pressurized air to the ejector device in response to the temperature downstream of the heat exchanger. Best teaches providing a pilot operated (manual) valve which can be opened or closed manually to shut off or to allow a flow of compressed bleed air for a system. When the manual shut off valve is open, the bleed air may flow to a heat exchanger 16 and vent via a throttle valve 30 to a conduit 24. There is no disclosure in Best of controlling the flow of coolant air through the heat exchanger. Rather, the only temperature control which might be achieved is by operating the throttle valve 30 downstream of the heat exchanger 16 to restrict the flow of pressurized air through the heat exchanger. Best has no teaching of controlling the amount of pressurized air which may be diverted to an ejector device in order to vary the flow of coolant air to the heat exchanger. Without such a teaching, the claims clearly are not anticipated.

The office action points out that the Best specification suggests using a jet pump powered by pressurized air to drive coolant through the heat exchanger when the aircraft is on the ground. However, a jet pump is not an ejector device. Moreover, there is no suggestion in Best of controlling the amount of the pressurized air which is fed to the jet pump to vary the coolant flow to the heat exchanger in accordance with the temperature of the pressurized air sensed downstream of the heat exchanger.

Without such a teaching, claims 1-8 are clearly not anticipated by Best and the rejection under 35 U.S.C. §102(b) must be withdrawn.

Applicants respectfully traverse the rejection of claims 1-8 under 35 U.S.C. §103(a) as being unpatentable over Biagini U.S. patent 4,312,191 in view of the Best patent and of Rannenberg U.S. patent 4,209,993. Biagini does suggest in Fig. 3a that a pressurized air flow in a conduit 91 may operate an ejector device 90 to induce a flow of coolant air through a heat exchanger. However, there is no teaching in the art of record of placing a valve in the conduit 91 for controlling the flow of pressurized air to the ejector in response to the temperature of the pressurized air downstream of the heat exchanger. Further, the air delivered to the conduit 91 is recirculated air under pressure (column 10, lines 19-23), not pressurized air from the same source as is fed to the heat exchanger.

The office action suggests that it would be obvious to achieve temperature control in the manner claimed because in Best, there is a throttle valve 30 downstream from the heat exchanger 16. However, the throttle valve 30 merely varies the amount of pressurized air which passes through the heat exchanger. It plays no part whatsoever in varying the flow of coolant air through the heat exchanger. The mere fact that valves are known for various purposes and are known in the relevant art does not render the claimed invention obvious to a person skilled in the art. There is no suggestion in the art of record of placing a valve in Biagini's conduit 91 and using the valve to control the flow of coolant air through the heat exchanger to control the temperature of pressurized air downstream of the heat exchanger.

Rannenberg teaches an arrangement somewhat similar to Best, namely there is a control valve 40 which responds to a temperature sensor to vary the amount of hot pressurized air which can flow through a heat exchanger. There is no suggestion in Rannenberg of controlling the amount of ram air. It is submitted that it would not be obvious to take the valve which Rannenberg uses to control the flow of pressurized hot air through the heat exchanger and of using it to vary the amount of pressurized air

fed to an ejector device in order to control the flow of coolant through the heat exchanger to achieve temperature control.

Method claims 1-5 clearly require an ejector device which causes coolant air to flow through a heat exchanger and the step of controlling the supply of pressurized air to the ejector device in accordance with the temperature of the pressurized air downstream of the heat exchanger. Apparatus claims 5-8 require an ejector device which receives some of the pressurized air from the same source which delivers pressurized air to a heat exchanger. The pressurized air flowing to the ejector device causes coolant air to flow through the heat exchanger. A controller is responsive to the temperature of the pressurized air downstream of the heat exchanger for controlling the supply of pressurized air to the ejector device. This arrangement is not taught in Biagini, Best or Rannenberg, either alone or in combination. Since none of the references suggest using the temperature of the pressurized air downstream of a heat exchanger for controlling the flow of pressurized air to an ejector device which induces a flow of coolant air through the heat exchanger, the claims are not unpatentable over these reference. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) is requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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